Claims

[c1]   1. A system for providing clinical laboratory test ordering and results reporting with an embedded consultation service, comprising:

an order entry subsystem for submitting orders for at least one diagnostic test;

a laboratory for receiving said orders and for managing patients to fill said orders, thereby generating test results;

a data storage subsystem for receiving and retaining test results from said laboratory;

a triage subsystem for comparing test results downloaded from said data storage subsystem with a predetermined reference range specific to such results, with said triage subsystem setting an abnormal results flag in the event that the test results are outside of said reference range; and

a reporting-consulting subsystem for receiving the results of said comparison from said triage subsystem, with said reporting-consulting subsystem transmitting the processed test results, comprising at least the results of said comparison, to the person requesting said at least one diagnostic test, and with the reporting-con-

sulting subsystem further transmitting results bearing an abnormal results flag to an embedded consultant, with said reporting-consulting subsystem providing at least one template for selection by said consultant to generate a consultative report concerning the test results.

[c2]   2. A system according to Claim 1, wherein said template provided by said reporting-consulting subsystem further comprises at least one data source for providing interpretive data for generating said consultative report.

[c3]   3. A system according to Claim 1, wherein said template provided by said reporting-consulting subsystem further comprises at least one data source for providing data for generating said consultative report, with said data source providing said data as a function of at least the value of said test results.

[c4]   4. A system according to Claim 1, wherein said template provided by said reporting-consulting subsystem further comprises at least one computer-linked source of additional information for use by said consultant for generating said consultative report.

[c5]   5. A system according to Claim 4, wherein said computer-linked source of additional information comprises an Internet-based source.

[c6]   6. A system according to Claim 1, wherein said reporting-consulting subsystem further comprises a conferencing subsystem for scheduling a conference between the person submitting the test request and the embedded consultant who generated said consultative report.

[c7]   7. A system according to Claim 1, wherein said reporting-consulting subsystem further comprises a conferencing subsystem for scheduling a computer net meeting between the test requester and the embedded consultant who generated said consultative report.

[c8]   8. A system according to Claim 1, wherein said reporting-consulting subsystem further comprises a conferencing subsystem for scheduling a net meeting between the test requestor, the embedded consultant who generated said consultative report, and at least one additional consultant.

[c9]   9. A system according to Claim 1, wherein said reference range is determined as a function of at least one prior recorded test result for the patient being tested.

[c10]   10. A system according to Claim 1, wherein said reporting-consulting subsystem further comprises a routine for selectively uploading previous test results for a plurality of patients and a subroutine for predicting future

test results based at least in part upon said stored test results.

[c11]   11. A system according to Claim 1, wherein said reporting-consulting subsystem further comprises an alert subsystem for establishing a time-based test sequence, with said reporting-consulting subsystem contacting said clinician in the event that patient test results are not entered into said data storage subsystem according to a specified time interval, with said alert subsystem also having the capability of causing the clinician to be contacted in the event that said test results indicate that said patient requires immediate intervention.

[c12]   12. A system according to Claim 1, wherein said template incorporates interpretative data for use by the embedded consultant in the event that the test results require additional analysis.

[c13]   13. A system according to Claim 12, wherein said interpretative data comprise at least one of: patient-specific archival data, generic tabular data, generic graphical data, and patient-specific graphical data.

[c14]   14. A system for facilitating the provision of clinical laboratory services, comprising:

an Internet based order entry subsystem, accessible by

clinicians, for submitting orders for diagnostic tests to a laboratory;

a data storage subsystem for receiving and retaining both contemporary and archival laboratory test results;

a triage subsystem for downloading said test results from said data storage subsystem, with said triage subsystem comparing said test results with predetermined reference range values, with said triage subsystem causing the test results to be transmitted over a computer network to both the requesting clinician and to a reporting-consulting subsystem in the event that the test results are outside said reference range values; and

a reporting-consulting subsystem for receiving said test results lying outside of said reference range, with said reporting-consulting subsystem providing at least one template, selectable by an embedded consulting physician using a networked terminal, with said consulting physician generating a consultative report using said template and said networked terminal, and with said report being based upon said test results, and with said template comprising at least one data source for providing data for generating said report, with said data source providing said data as a function of at least the value of said test results.

[c15]   15. A system according to Claim 14, wherein said triage

subsystem causes archival test results contained within said data storage subsystem to be transferred to said clinician at the same time contemporary test results are transferred to the clinician.

[c16]   16. A method for providing clinical laboratory services, comprising the steps of:

submitting an order to a laboratory for a diagnostic test by means of a networked terminal device;

managing a patient to fill said test order, thereby generating test results;

loading said test results into a data storage subsystem;

comparing said test results contained within said data storage subsystem with predetermined reference range values, and thereafter causing the test results to be transmitted directly to the test requestor, using a networked terminal device, in the event that the test results are within said reference range, but causing the test results to be transmitted by a networked terminal device to a consulting physician via a consultative reporting-consulting subsystem in the event that the test results are outside said reference range;

receiving said test results lying outside of said reference range in a reporting-consulting subsystem, and using said reporting-consulting subsystem to provide at least one selectable report template;

using said report template and said consulting physician to generate a consultative report based at least in part upon the test results; and

communicating said consultative report, bearing an electronic signature, to the test requester by means of a networked terminal device.

[c17]   17. A method according to Claim 16, wherein said report template incorporates at least one importable additional data source for providing test result driven data for generating said consultative report.

[c18]   18. A method according to Claim 16, further comprising the steps of requesting and performing additional reflexive tests in the event that said test results indicate that such testing is desirable, with the results of said reflexive tests being communicated to said test requester by means of a networked terminal device.

[c19]   19. A method according to Claim 16, further comprising the step of linking the test requestor to a conferencing system by means of a networked terminal device, for scheduling a conference with the consultant who generated said consultative report.

[c20]   20. A method according to Claim 16, further comprising the step of linking the test requestor to a conferencing

system by means of a networked terminal device, for scheduling a net meeting with at least the consultant who generated said consultative report.

[c21] 21. A method according to Claim 16, further comprising the step of billing the patient's insurer for the time expended by the consulting physician to analyze said test results and to draft said consultative report.

[c22] 22. A system for providing clinical laboratory services, comprising:

an Internet based order entry subsystem for use by a clinician to submit orders for diagnostic tests;

a data storage subsystem for receiving and retaining test results from a clinical laboratory;

a triage subsystem for comparing said test results with predetermined range values, with said triage subsystem causing the test results to be transmitted by a reporting-consulting subsystem directly to the test requestor via the Internet, and with said triage subsystem causing the test results to be transmitted to a reporting-consulting subsystem in the event that the test results are remarkable in view of said predetermined range values, with said reporting-consulting subsystem receiving said remarkable test results and providing at least one template for selection by a consultant to generate a consultative report concerning the test results, and with said tem-

plate comprising at least one Internet link to an additional source of diagnostic information.

[c23] 23. A system according to Claim 22, wherein said reporting-consulting subsystem provides for the affixing of said consultant's electronic signature to said consultative report and for sending the consultative report to the requesting clinician via the Internet.

[c24] 24. A system according to Claim 23, wherein said electronic signature is a digital signature.

[c25] 25. A system according to Claim 23, wherein said electronic signature is a digital signature meeting the requirements of the Health Insurance Portability and Accountability Act ("HIPAA").

[c26] 26. A system according to Claim 22, wherein said predetermined range values comprise a reference range selected as a function of at least one prior test result of the patient being tested.

[c27] 27. A system according to Claim 22, wherein said consultative report comprises at least one URL for use by the clinician receiving the consultative report.

[c28] 28. A system according to Claim 22, further comprising a billing routine for invoicing said patient's insurer by

means of an invoice bearing an AMA CPT code.